

# Homework

p. 424: 15-29 (odds), 35, 37

**PROPERTIES OF RADICALS** Simplify the expression.

15.  $\sqrt{20} \cdot \sqrt{5}$     17.  $\sqrt[4]{8} \cdot \sqrt[4]{8}$     19.  $\frac{\sqrt[5]{64}}{\sqrt[5]{2}}$     21.  $\frac{\sqrt[4]{36} \cdot \sqrt[4]{9}}{\sqrt[4]{4}}$

23. ★ **MULTIPLE CHOICE** What is the simplest form of the expression  $3\sqrt[4]{32} \cdot (-6\sqrt[4]{5})$ ?

(A)  $\sqrt[4]{10}$

(B)  $-18\sqrt[4]{10}$

(C)  $-36\sqrt[4]{10}$

(D)  $36\sqrt[8]{10}$

**SIMPLEST FORM** Write the expression in simplest form.

25.  $\sqrt[6]{256}$

27.  $5\sqrt[4]{64} \cdot 2\sqrt[4]{8}$

29.  $\frac{3}{\sqrt[4]{144}}$

**COMBINING RADICALS AND ROOTS** Simplify the expression.

35.  $\frac{1}{8}\sqrt[4]{7} + \frac{3}{8}\sqrt[4]{7}$

37.  $-6\sqrt[7]{2} + 2\sqrt[7]{256}$